周报/梅鸿辉

1.9-1.15

Reactive Programming

Reactive Vega[10] 中运用了其中的一个子类（Event-driven Functional Reactive Programming, E-FRP）。

我们的工作也有类似的思想在里面，详见附加 PPT 的最后一个样例。

想要学习并实际试用一下相关的库和框架。目前网上的资料比较匮乏，准备从 Rx 库（http://reactivex.io/languages.html）开始尝试一下。

论文阅读

设计相关

[1] Cross, N. (1982). Designerly ways of knowing. Design Studies, 3(82), 221–227.

[2] Kolodner, J. L., & Wills, L. M. (1993). Case-based creative design. AAAI Spring Symposium on AI and Creativity, 1, 50–57.

描述了 specification refinement、idea exploration 和 evaluation 之间的不断循环迭代。包括他们可能产生和发展的方式。

[3] Kolodner, J. L., & Wills, L. M. (1996). Powers of observation in creative design. Design Studies, 17(4 SPEC. ISS.), 385–416.

同上，有个描述类似过程的模型

Reactive Programming

[4] Czaplicki, E., & Chong, S. (2013). Asynchronous Functional Reactive Programming for GUIs. Pldi, 411–422.

[5] Wan, Z., Taha, W., & Hudak, P. (2002). Event-driven FRP. Practical Aspects of Declarative Languages, 155–172.

[6] Cooper, G. H., & Krishnamurthi, S. (2006). Embedding dynamic dataflow in a call-by-value language. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 3924 LNCS, 294–308.

[7] Bainomugisha, E., Carreton, A. L., Cutsem, T. Van, Mostinckx, S., & Meuter, W. De. (2013). A Survey on Reactive Programming. ACM Computing Surveys (CSUR), 45(4), 1–34.

其他

[8] Talton, J. O., & Klemmer, S. R. (2011). Bricolage : Example-Based Retargeting for Web Design. Design, 2197–2206. https://doi.org/10.1145/1978942.1979262

自动的检测网页 DOM 结构，将两个网页的类似功能区对应起来，用以在新内容上应用已有的设计

[9] Hullman, J., Drucker, S., Riche, N. H., Lee, B., Fisher, D., & Adar, E. (2013). A Deeper Understanding of Sequence in Narrative Visualization, 19(12), 2406–2415.

输入多个可视视图，自动分析他们之间的转换关系，并生成合适的展示顺序

引用

[10] Satyanarayan, A., Russell, R., Hoffswell, J., & Heer, J. (2016). Reactive Vega: A Streaming Dataflow Architecture for Declarative Interactive Visualization. IEEE Transactions on Visualization and Computer Graphics, 22(1), 659–668.